WHAT IS CLAIMED IS:

1. An oscillation circuit comprising:

a first transistor including a base inputted an oscillation signal, an emitter connected to a ground potential, and a collector;

a second transistor including a collector connected to a power supply potential, a gate and an emitter; and

a load having one end connected to the collector of the first transistor, and another end connected to the emitter of the second transistor, the load causing a voltage drop proportional to the power supply potential,

wherein the voltage drop caused by the load reduces dependency of a base-collector voltage of the first transistor upon the power supply potential.

2. The oscillation circuit according to claim 1, wherein the voltage drop caused by the load changes in accordance with a change in the power supply potential, thereby causing negative feedback to the base-collector voltage of the first transistor.

3. The oscillation circuit according to claim 1, wherein only the voltage drop caused by the load depends upon a change in the power supply potential in a current path extending from the base of the second transistor to the base of the first transistor via the load.

4. The oscillation circuit according to claim 1, wherein a change in the voltage drop caused by the load, which occurs when the power supply potential has changed, is substantially equal to a change in a potential difference between the bases of the first and second transistors.

5. The oscillation circuit according to claim 1, further comprising:

an oscillation section which outputs the oscillation signal of a constant oscillation frequency; and

a resistance element provided between the bases of the first and second transistors, a change in a voltage drop at the resistance element, which occurs when the power supply potential has changed, being substantially equal to a change in the voltage drop at the load.

6. The oscillation circuit according to claim 1, wherein the load is a resistance element.

7. The oscillation circuit according to claim 1, further comprising a capacitance element having an electrode connected to the collector of the first transistor, and another electrode connected to the ground potential.

8. The oscillation circuit according to claim 1, wherein the first transistor includes:

a first-conductivity-type first collector area, at least a portion of the first collector area functioning

as the load;

a first-conductivity-type second collector area provided on a surface of the first collector area and having a lower impurity density than the first collector area;

a second-conductivity-type base area provided in a surface of the second collector area;

a first-conductivity-type emitter area provided in a surface of the base area; and

a first-conductivity-type first leading area extending from a surface of the second collector area to the first collector area, the first collector area being connected to the emitter of the second transistor via the first leading area.

9. The oscillation circuit according to claim 8, further comprising:

a capacitance element having one electrode connected to the collector of the first transistor, and another electrode connected to the ground potential; and

a first-conductivity-type second leading area extending from a surface of the second collector area to the first collector area, the first collector area being connected to the one electrode of the capacitance element via the second leading area.

10. The oscillation circuit according to claim 8, wherein the base area is divided into a plurality of

base area parts arranged in parallel in the surface of the second collector area, the base area parts having a planar pattern in which the base area parts are arranged in stripes, the base area parts being electrically connected to each other.

11. An oscillation circuit comprising:

a first transistor including a base inputted an oscillation signal, an emitter connected to a ground potential, and a collector;

a second transistor including a collector connected to a power supply potential, a gate and an emitter; and

load means for reducing dependency of a base-collector voltage of the first transistor upon the power supply potential when a voltage drop occurs, said load means including one end connected to the collector of the first transistor, and another end connected to the emitter of the second transistor.